OFFICE OF CONSERVATION

STATE OF LOUISIANA

IN RE: GROUND WATER

RESOURCES COMMISSION MEETING

REPORT OF MEETING

HELD AT

BATON ROUGE, LOUISIANA

JULY 31, 2006

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OFFICE OF CONSERVATION

STATE OF LOUISIANA

IN RE: GROUND WATER

RESOURCES COMMISSION MEETING

Report of the public hearing held by the Ground Water Resources Commission, State of Louisiana, on July 31, 2006, in Baton Rouge, Louisiana.

IN ATTENDANCE:

REPRESENTING THE OFFICE OF CONSERVATION:

Scott Kirkpatrick, Chairman

James H. Welsh, Commissioner of Conservation

Karen Gautreaux, Department of Environmental Quality

Zahir "Bo" Bolourchi, DOTD - Water Resources

John Roussel, Capital Area Groundwater Commission

Linda Walker, League of Women Voters

Karen Irion, Department of Health and Hospitals

Gene Coleman, Sparta Groundwater Conservation District

AGENDA

I. Call to Order -- Governor's Office
II. Ground Water Resources Division Activities
III. Old Business
A. Update on Sparta "Areas of Groundwater Concern"
1. Order AGC-1-05 - Anthony L. Duplechin, Jr.
(a.) Reporting Requirements - Timothy Seiler, Jr.
2. Educational Incentives - Rep. Hollis Downs
3. West Monroe Waste Water Reuse Project
Terry Emory and John Stamberg
B. Update on proposed language for Regional Water Advisory Groups
IV. New Business
A. Legislative Update
1. Act 29
2. Act 30
B. Panel Discussion:
Representatives of the following State and Federal agencies have been invited to speak about the effect of Hurricanes Katrina and Rita on Louisiana ground water resources: DOTD, DEQ, and USGS
V. Commission Comments
VI. Task Force Comments
VII. Public Comments
VIII. Schedule for Next Meeting
IX. Adjourn

LOUISIANA GROUND WATER RESOURCES
COMMISSION MEETING
JULY 31, 2006
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MR. KIRKPATRICK:
We're going to go ahead and call this meeting of the Ground Water Resources Commission together.
Mr. Duplechin, would you call the roll?
MR. DUPLECHIN:
Okay. I'm going to call out the entity that is represented on the Commission. If you would state your name for the record when I do that.
Governor's Office?
MR. KIRKPATRICK:
Here, Scott Kirkpatrick.
MR. DUPLECHIN:
Commissioner of Conservation?
MR. WELSH:
I'm here, Jim Welsh.
MR. DUPLECHIN:
Department of Agriculture and Forestry?
(No response.)
Department of Economic Development?
(No response.)
Department of Environmental Quality?
(No response.)
Department of Health and Hospitals?
MS. IRION:
Karen Irion, here.
MR. DUPLECHIN:

Department of Wildlife and Fisheries?
MR. ROUSSEL:
John Roussel, here.
MR. DUPLECHIN:
Department of Transportation and Development?
MR. BOLOURCHI:
Bo Bolourchi, I'm here.
MR. DUPLECHIN:
Governor's Office of Coastal Activities?
(No response.)
A geologist or engineer with expertise in ground water resource management?
(No response.)
A representative of either Louisiana Chemical Association, the Louisiana Mid-Continent Oil and Gas Association, the Louisiana Association of Business and Industry, or the Louisiana Pulp and Paper Association?
(No response.)
Louisiana Farm Bureau?
(No response.)
Police Jury Association of Louisiana?
(No response.)
Louisiana Municipal Association?
(No response.)
Sparta Ground Water Conservation District? Gene?
MR. COLEMAN:
Gene Coleman, as a guest. Richard Durrett is not available today.
MR. DUPLECHIN:
Capital Area Ground Water Conservation District?

(No response.)

Representative of the Chicot Aquifer?

(No response.)

Louisiana Landowners Association?

(No response.)

Representative of either the Louisiana Wildlife Federation, Coalition to Restore Coastal Louisiana, or the League of Women Voters?

MS. WALKER:

Linda Walker, here.

MR. DUPLECHIN:

Thank you.

MR. KIRKPATRICK:

All right. Thank you. And I'll just mention, from that roll call, we obviously have a number of vacancies on this Commission. Our office is aware of that and is working to fill those, so, hopefully, by the next meeting, we will have a more robust group up here.

So I think we're ready for the Ground Water Resources Division's Activities.

MR. DUPLECHIN:

Okay. Thank you. Before I give my report, I'd like to ask the Commission and all present to observe a moment in silence in observance in memory of Mike Bourgeois who passed away on February 1st of this year. Mike was Executive Director of Louisiana Landowners Association and represented that organization on the Commission, and Mike had previously been Deputy Secretary of DNR during the mid-1980s.

(Moment of silence.)

MR. DUPLECHIN:

Thank you.

As most of you recall, our last meeting was in June of 2005, and since then, a lot of water has not only gone under the bridge but, in some cases, over the bridge. Hurricanes Katrina and Rita have had a profound effect on all of us, in both our professional and personal lives.

After we met in June last year, the Division hosted an information booth at the Louisiana Rural Water Association's annual conference in Alexandria. Several members of my staff were at that meeting manning the booth, and I made two presentations at classroom sessions. Tim Seiler of my staff was appointed to the Advisory Committee on the Regulation and Control of Water Well Drillers and has been attending meetings of that body since.

On August 15, 2005, Order AGC-1-05 went into effect declaring three areas of ground water concern in north Louisiana. This action will be discussed in more detail later in this agenda. Later on in the month, I made a presentation on water rights in Louisiana to a group in Lafayette and then attended a meeting of the Toledo Bend Joint Operating Committee at the reservoir dam site in Texas. This was right at the end of August, just before Hurricane Katrina hit.

Following Hurricane Katrina's arrival in the state, various DNR personnel were assigned to work with other State agencies as part of the hurricane relief

efforts. Charlotte Hardison, the Division's administrative coordinator, worked with the Louisiana Office of Emergency Preparedness.

The Commission was scheduled to meet on December -- on September 26th last year, but Hurricane Rita took care of postponing that meeting.

Following that, I attended a meeting of the Sabine River Compact Administration in October. On October 15th, Governor Blanco issued Executive Order KBB-2005-63, which created the Louisiana Recovery Authority. Within the many task forces and recovery teams of LRA was the Water Treatment and Water Supply Action Team, to which I was assigned and later named team leader, and I have been working on this and attending meetings with that body monthly since then. This team has since been renamed and re-focused to be the Aquifer Protection Action Team, and we'll talk a little bit more about some of the work that's been done with this group later.

In November, Louisiana Water Resources town meeting was held in downtown New Orleans, and several members of the Commission and Task Force were at attendance at that meeting.

In May, the Office of Conservation presented a certificate of commendation to former Commissioner Richard Durrett on the occasion of his retirement from Lincoln Parish government, citing his hard work and dedication to ground water conservation.

Just two weeks ago, we hosted another information booth at the Rural Water Association's annual

conference. During the awards banquet, I accepted an appreciation award to DNR on behalf of Secretary Angelle.

That's our report.

MR. KIRKPATRICK:

Are there any questions?

(No response.)

All right. We can move on to old business, an update on the Sparta areas of ground water concern.

MR. DUPLECHIN:

Okay. As I stated in my report, we -- before the last Commission meeting in June of last year, the Commissioner had issued an order declaring the three areas of ground water concern, but it did not go into effect until August 15th. I have included in your packets, and there are copies available for the rest of the people here, a copy of the order, including a memorandum from the Commissioner to interested parties, and the order, which goes over the requirements of people who own water wells in the three areas of ground water concern, as well as maps showing where those areas are.

One of the main requirements of the order is that owners of each non-domestic well in an area of ground water concern submit a monthly report within 60 days of the end of the month to the Commissioner showing the amount of water pumped on a monthly basis and the purpose for which it was used, and if the static water level is available, we would like that information.

At this time, I'd like to ask Tim Seiler of our

staff to come up and give a report on the -- what we've gotten from the reporting requirements so far.

MR. SEILER:

Thank you. Good afternoon.

As Tony has stated, on August 15, 2005, the Commissioner of Conservation issued Order No. AGC-1-05, designating several areas of the Sparta aquifer areas of ground water concern. Pursuant to the order, owners of non-domestic wells are required to submit monthly ground water usage reports to the Office of Conservation stating the DOTD well number, what the well was used for, the usage, and the static water level, if available.

An extensive research program was performed by the Ground Water Resources Division to identify the current ownership of each well identified as being located in the areas of ground water concern. The research consisted of the following. First, we researched the DOTD database for active, non-domestic water wells in the areas of ground water concern; two, research the DOTD files for ownership information; three, contacted the owner obtained from research of DOTD to verify the current ownership of water wells, or if information obtained was not correct, locate current owner by various methods, such as name or reverse address search on the internet phone book; four, perform title search at clerk of records in each parish to determine the current ownership of the land the water well is located. Because well locations are located to the nearest second and because the plates located at the

clerk of records do not have longitude and latitude plotting for grids, the Division was only able to narrow down the ownership of a few people and not the exact owner of the well, so we had to do further work, such as phone calls that were placed to these people in order to determine ownership. For the wells in which potential owners could not be contacted, letters were sent with a map showing the location of the water well and a request that the owner contact the Division. Six, letters were also sent out to the known water well owners instructing them on reporting requirements.

The results of that investigation showed that we, first, were looking for a total of 81 owners. Nine owners we were unable to contact, they represented 12 water wells that we were unable to determine who the owner was or whether they were still active. Owners that have reported to date are 26, representing 67 wells; owners that have not reported are 18, representing 53 wells; and owners whose wells were found to be inactive, plugged and abandoned, or domestic and not required reporting were 31 owners, representing the number of 40 wells.

The information that you have here regarding the summary has several more tables which pretty much show in detail who's been contacted in various areas of ground water concern and who has reported.

The last table, Table 9, shows the monthly usage per each area of ground water concern and gallons per month for the three areas of ground water concern.

It should be noted that the usage reports are due

within 60 days of the reporting month, so not all reports are in yet for May and June. In addition to those companies or people who have not reported, they may begin reporting, be able to submit reports, for previous months. Therefore, all the information on Table 9 is subject to change.

And that's basically all I have for that.

MR. DUPLECHIN:

Thank you, Tim.

MR. KIRKPATRICK:

Any questions? I did. Did you mention if -- for those who have not reported, maybe what the next steps are to encourage them to report?

MR. SEILER:

For those who have not reported, you know, they keep calling them up, and we're trying to get some information from them. It's just a matter of some companies are trying to wait until they put meters on their wells. Other ones are -- we're just having trouble getting them to respond.

MR. KIRKPATRICK:

Okay.

MR. DUPLECHIN:

I might point out that some of the people that haven't replied, they fall under the "haven't replied" category, but they have replied but the format in which they have submitted the information doesn't fit the needs of what was required, so we're trying to get them to send it in in a format that we can use. But I did make a trip to north Louisiana in March and visited as

many of the people that had reported as I could, personally, to tell them how important it was to get this information in.

MR. KIRKPATRICK:

What kind of response are you getting, generally, from them?

MR. DUPLECHIN:

I got a pretty good. The -- you can look at the bottom of Page 3 and see where a bulk of the wells are in the "non-responding" category that I did have trouble getting in touch with the holding companies that operate those -- or do the recording for those wells. People were either out of the office or busy or something.

MR. KIRKPATRICK:

Okay. So do we anticipate at the coming months, we will get --

MR. DUPLECHIN:

We will continue to try and contact them, even if it does take going up to their offices again.

MR. KIRKPATRICK:

All right. Thank you.

MR. DUPLECHIN:

Our next speaker on the Sparta will be Representative Downs, and I'd like Commissioner Welsh to introduce him.

MR. WELSH:

Thank you, Tony.

We do have a special guest this afternoon. Mr. Hollis Downs is a representative of the State of

Louisiana from District 12. He is a Republican. He covers the parishes of Lincoln and Union Parish. He was elected to office first in 2003. He makes his office in the town of Ruston. He's a financial planner, by occupation. He sounds like a good guy to know in this day and time. His committee assignments are agriculture, forestry, aquaculture, and rural development, education, transportation, highways, and public works, and he's on the House special committee on disaster planning for the middle and north Louisiana subcommittee.

Since 2003, Mr. Downs has followed very closely the Louisiana ground water management programs as a State representative, being very active with the Sparta Aquifer, the situation in north Louisiana. There's an ongoing educational program regarding the Sparta Aquifer, and Mr. Downs has generously agreed to tell us all about that this afternoon, as well as any other matters and concerns that you may have regarding the ground water usage and management of the Sparta in his area.

So I have the honor to present to you now, Mr. Hollis Downs. Mr. Downs?

REPRESENTATIVE DOWNS:

Thank you, Commissioner Welsh.

Mr. Chairman, Commissioner, Commission members, and the audience, I'm delighted to be here. I want to move as rapidly as I can, but at the same time, since this is a rare opportunity to try to cover the areas that we need to cover so that we will unequivocally

guarantee our success in this endeavor, because we're dealing with something that you can't live without, and so we need to work on that.

First of all, with regards to the report that we just got -- and Tony and I had this discussion before we started today, and I've seen all that data and I appreciate very much the efforts that we're making to get the monthly reports on the pumpage in the area, because we all know that, ultimately, the only way we can be absolutely certain about what we're doing is to have good data and to track it. And so in this area, I want to insist that we move rapidly and firmly to make sure that everybody is reporting that's required to report, and that it's real information. One of our next steps will be to make sure that it's real information and not something they're speculating about, and that means that they have to be metered, otherwise, they're guessing. So, you know, I know we'll want to move in those directions.

I mean, ultimately, our goal has to be sooner than later that every commercial well, every water system, everything that is commercial, has got to be metered at the well, and it's got to be metered at the end user. In the absence of that, we're not ever going to know for sure what we're producing and how much we're losing, and I'm willing to help you achieve that. Hopefully, we can get it done in a simple matter, but if it requires legislation, I'm prepared to do that. So I think that's really important.

Just briefly, I think most of you all know the

history, but a real quick version, the Sparta is a viable water source for much of this state, appropriately a 16-parish area, a split by I-20 in north Louisiana. And what we've learned about the Sparta is that it can sustain about 52 million gallons a day of pumpage and remain in balance. We know that we are pumping somewhere in the neighborhood of 70 million gallons a day, and -- plus or minus, or that we were. We would like to think that we may have already reduced that a tad, but we're -- in that area. So we know we were over-pumping it 15 to 20 million gallons a day, and because of that, we were causing problems, and eventually, we would have run ourself dry. In fact, we had begun to run ourself dry in a few areas and had some salt water problems in some other areas. So that's kind of the magnitude of it. We've got to work back from there, get it down to 52 million gallons a day through all means available to us, and then, of course, look for other sources for the future. So I'm optimistic about that. I think that frames it pretty close, doesn't it?

We -- you know, it's a passionate issue, particularly, it's a passionate issue in our area where it is our source of water along the line, and so it would be a fair statement to say that not everyone has agreed with everything that we've done up to this point along the line. And some would have hoped that it would have been much stricter. A few probably wish we would have just left it alone and done nothing, but I think we're moving forward, that we're doing the right

thing. The mass incumbent is on us to do it because, as an example -- and Tony and I talked about this -- now, if we don't get on top of it immediately, those people who are not reporting, then our critics would say, "Well, that's just about what I expected. You don't really care about that. They're not doing it, and you're not going to do a thing about it." So we don't -- we've got to have facts to do it right, and we need to win this PR battle, also. So it's imperative that we immediately move to get everybody reporting and to guarantee that they're reporting accurately.

We're dealing with the Sparta from a four-pronged approach, and since we just had a meeting a few weeks ago in Ruston with the LRWA, Louisiana Rural Water Association, who's one of our partners in solving this issue, this is normally something that, in speaking in public, you should never do, but I drafted a letter that is about to go out, and I'll leave a copy with you all today. And it's to all 177 water authorities, rural waters -- commercial ventures in the Sparta area, as well as the entire legislative delegation throughout that area, as well as some others, but I think that it will give the flavor of the situation and touch for you clearly on there. So if you'll permit me to do that, and then you can critique me, in public speaking, says you read something and that violates all the rules, so I'm relying, but that might move it faster.

As I said, going to all the water systems, all the delegation: As part of our ongoing efforts to address the issues related to the long-term viability of the

Sparta Aquifer, I recently invited the Louisiana Rural Water Association to come to Ruston. LRWA gave a report on the status of the commercial water systems that existed within the Sparta, their estimates of the amount of leakage in those systems, and the reasonable amount of leakage reduction that could take place. Additionally, the LRWA gave information concerning water rates within the systems, a report showing the number of systems that were fully metered, both at the wells, as well as the customers, the end users.

It was an excellent presentation, demonstrated to me and all present that we have a huge opportunity to address a major portion of our daily Sparta water shortages by reducing the amount of leakage that exists today to a reasonable level. According to LWRA, it is estimated that of the 177 systems in the Sparta, we are leaking 24 million gallons per day between the time the water is pumped out of the ground and the time it gets to the end users.

I think most of you know that it's estimated that the over-pumpage of the Sparta is approximately 17 million gallons a day. In theory, we could solve 100 percent of that by reducing leakage in the water systems within the Sparta, but reality is, you can't have a leak-tight system. They've estimated to us that it's very reasonable to reduce the amount of leakage down to about 15 percent of the water that's being pumped.

If we're successful in reducing the leakage down from a number that they now tell us is greater than 30

percent to a number that's approximately 15 percent, we can save 12 million gallons of water per day. Louisiana Rural Water Association data indicated that these systems within the Sparta -- there are systems that currently leak less than 10 percent a day, and that there are systems that leak from 60 to 80 percent per day, and that the average leaking in the Sparta is greater than 30 percent.

Leak reduction of the commercial systems within the Sparta is one of our four efforts that we're undertaking to solve the Sparta water shortage and to guarantee that we have an adequate supply from this pristine aquifer for future growth. The other efforts include individually and business conservation of daily water usage by the implementation of reasonable water-saving behavior ranging from how we brush our teeth and shave to toilet leakage, water-saving shower heads, and other ideas. We just conservatively estimated that without altering our lifestyles, we can reduce the daily usage of the Sparta by 5 to 6 million gallons per day through good, personal stewardship of our water.

LSU Cooperative Extension and the Ag Center have taken on the responsibility for public education in this effort which was launched this past spring. If you've not seen their printed materials and their plans for addressing this issue, I encourage you to do so. I am very impressed with what they've done, and I am pleased to tell you they're working through the schools and 4-H Clubs with this effort underway and going on

for many years to come.

We are addressing the re-treatment of water through a pilot program now underway in West Monroe between the City of West Monroe and Graphics Designs. If and when the pilot program is successful, which should come within the next six months, we will move forward with plans to construct such a facility that Graphics has agreed to use and remove itself from the Sparta. It is estimated that that will save 10 million gallons per day. The projected cost of that project is plus or minus $18 million.

We're exploring alternative water sources and the final funds have just recently been secured to pay for the engineering study to pay for a pipeline to -- from Ruston to Lake D'Arbonne. If those studies indicate that the project is viable, the estimated cost of that project today is plus or minus $75 million to produce another 10 to 12 million gallons of water per day.

If we are responsible stewards and save 5 or 6 million gallons a day through good public education, that comes at a cost of zero. Actually, it will result in a savings to the individuals whose water bills will be lower. If we can reduce the leakage of our systems to a reasonable number, that can save an additional 12 million per day.

I realize that all the leaks in the system can't be fixed for free, but they can certainly be fixed for less than 18 million or 75 million. So it's imperative that we take steps to solve leakage, use personal water-saving behavior, and enhance our public education

efforts before we go to the Legislature and to the Congress and ask citizens around the state and the nation to pay for our solutions.

In addition to making our best efforts to reduce the leakage within our system, it is important that each of you revisit the water rate structures to make sure that they provide adequate revenues for you to build reserves to keep your systems operating effectively and to make repairs when your systems break down. In addition to water rates that help you have the reserves you need, the proper rate structure will act as a conservation tool, because people will naturally attempt to reduce their usage in order to save on their water bills. There is ample evidence to prove this.

It is essential that every commercial well within the Sparta be metered at the well. If yours are not currently metered, I encourage you to move as expeditiously as possible to meter all of your wells. It is impossible to really know how much you're pumping and how much you're leaking if you're not metered at the well. It is also essential that all of your customers have meters. If your structure still allows for a flat rate and you don't have meters at your end users, then I encourage you to move as expeditiously as possible here to remedy this situation. Again, a proper rate structure will give you the revenues you need to help pay for these meters.

It's my understanding from LRWA that most lenders today will not lend money for newer or expanded rural

water systems unless you have metered wells and metered users and a reasonable rate structure for your system.

For those of you who may be involved with systems that are too small to raise the revenues necessary to improve your system, I encourage you to look for ways to partner with other systems or to be merged into other systems. I am aware of several systems within the Sparta that, even though they're separate systems, are connected to one another so they can back each other up in times of emergency.

Some of you are problem familiar with what used to be known as the "Governor's Office of Rural Development," whose funds were eliminated last fall after Katrina and Rita. I am pleased to report to you that the Legislature was able to recreate or create a new CDBG fund similar to the Federal funds under this definition. This funding will really function fairly similar to the way that the old GORD funds did in the past. Applications could be made for these funds, and I believe my colleagues and I will look favorable towards projects that improve rural water systems, provided that these systems are doing the things they need to do to run efficient, solvent water systems.

I believe most all of you are familiar with, have worked, or are currently working with the LRWA. If you're not, I strongly encourage you to do so. And for those of you who already work with them, if you've not had your systems checked recently for leakage, I ask you to be in touch with LRWA to get that done as soon as possible so that we can have current information on

the leakage of the systems. For those whose data indicates high levels of leakage and who have addressed these issues through improvements, I believe it's time for you to be checked again so that we can ascertain what kind of progress you've made.

We need to be diligent about targeting a leakage rate of 15 percent or less. I'm told that the national average is 10. The Louisiana average is 25. The Sparta average is greater than 30. Our estimate of 12 million gallons per day is predicated on reducing leakage to 15 percent. Clearly, if we can target the national average of 10, we can save several million additional gallons per day.

This is no longer an issue that we can ignore, and I'm confident that you, as individuals involved in water systems, will make every effort to reduce the leakage in your systems to guarantee that your systems are financially solvent and that you have a rate structure that encourages conservation.

I hope that that covered the overall situation fairly well. I'd now like to just show you a couple of things, and then I'll be glad to take any questions or move on, because you've got an agenda.

I want to commend the Ruston Publishing Company, parent company of Ruston Daily Leader, and their partners throughout the area, but as we all know, Tony knows, the Commissioner knows, that they have been great advocates in this situation with regards to the water. They've not always agreed that everything we were doing was exactly the right things to do, but they

have been big players, great advocates.

Now, this is a list, and I'm going to -- they asked me to bring it and leave it with you as a gift to you to be aware of. But this is the PR battle that they've done themselves, and they've raised -- they're telling me that they've raised the equivalent of a quarter of a million dollars in free advertising, if you will, that's running, supposedly, from central Louisiana all the way up north. I can attest to the fact that The Leader and The Gazette and papers in our areas are running these regularly, all of these efforts to try to get you and I to do things that use our water more reasonably.

I can tell you that I've personally changed my habits significantly with regards to how I shave, brush my teeth, flush the toilet, things of this nature, and you can do so with never missing one beat in life's quality. I mean, it's unbelievable that I've wasted the water I've wasted in my lifetime brushing my teeth when you don't have to have the water running full force to do that. I mean, you know, you can dampen the brush, cut it off, brush your teeth. It's an amazing thing, so no telling how many million I've run down the drain. And just because your system is not in stress is no reason you shouldn't be practicing these same policies. In shaving, draw a little hot water in the basin and shave. I can't tell that my shave has changed whatsoever, but I think I'm three, four, five gallons of water now every time I shave. So we're trying to get people -- and, you know, there are other

things, for you gentlemen in the room, courtesy flushes are out now, if you will. It just takes too much water to flush those systems, so, I mean, we can't do that anymore. You know, if they're leaking, you've got to fix them.

That's what they're doing. I think it's a great piece, and I'll leave it with you, so we've got that and all. I'll give that to you all.

The Ag Extension people have really championed for us, and they're primarily targeting the schools through the 4-H Clubs. And, I mean, this hasn't come by accident. We've been in strong negotiations with them. You know, the Ag Center has really needed advocates in its budgeting process the last few years, so we've been negotiating with one another about just how we would get all this done, and they've really promised -- and it's a perfect fit for them in their mission. And so they have put together and distributed these kits, and I'll leave one of these for you here, as well.

And we got off to a big start with it this spring, right before school was out, these went home throughout all of the north Louisiana areas and quite a number of areas there. They have produced as much -- in fact, I've got a statistic somewhere, if I can find it for you, tell you what they've already done. Yes. They distributed, before school was out this year of their educational materials, fact sheets, and what have you, 65,500 of those through the schools, and it's already been a part of the 4-H Club. They have put together a teaching resource so the teachers not only can share it

in the classes, but they've built the resource materials for them to actually teach in the classroom on their -- you know, really, to change habits, you change it with the youngsters, so I'm quite proud of what they're doing.

In addition to that, they put together a water resources trailer, a lab, and we've had it in north Louisiana for the last several weeks, so you may have seen it when it was at the Peach Festival in Ruston, and I think they gave out over 500 pieces that they accounted for there. It was at the Watermelon Festival this weekend in Farmerville. So it's an ongoing tool. It's a PR tool, educational tool. So I'm quite, quite proud of what they're doing in that area, and that's the -- so they are the lead team for us in our public education and the changing of our personal habits.

I brought also for you -- before they got their materials done -- these are pieces that I print and distribute everywhere. And basically, if you look at their tips and these tips and our tips, I mean, they're all basically the same tips. It's just the more ways you tell it and the more ways you show it, the better, so we have these things together here. We're encouraging people, showing them how easy it is, playing to their decency, their stewardship. You know, the Lord created us to have dominion, but he told us to be good stewards and we've been grossly wasteful, and we're trying to work on that and improve that situation.

Some of the things -- I may have mentioned it, but

I want to see if I've missed anything. That was the one I told you about, the 500 at the Peach Festival. This is from the Ag people. They had another 500 participants gain knowledge through a presentation that they did in another location. Just in Lincoln Parish, we sent out 7,000 of the water-saving tips. Our superintendents, our school systems, really cooperated with us, so that is moving well there. Of course, Louisiana Rural Water Association -- and the reason that we just got this started in the last few months is because the same thing you already talked about. We were scheduled to do it a bit earlier, but then the twin witches came and visited us, and I would say they had their hands pretty full for several months, but we did have this the other day in this area.

And so between these four, all of which are completely, completely transferable to each of you who have your own issues in your own areas. And, I mean, water, you know, in most places in the world, it's the most precious commodity. There are places where it's worth a lot more than oil, so if it hadn't -- the problem hadn't visited you yet, it probably will at some point, and every one of these ideas are applicable, I believe, to you.

And what we see now is that if we practice reasonable conservation, and then if we do a reasonable job of detecting and improving our rural water systems, then, actually, we can reach equilibrium in the Sparta through those two. We can reach our 17-million-gallon target there. Then when we complete our project in

West Monroe and Farmerville and any of these others, now we are securing our future for the next 75 or 100 years or longer. And, of course, as soon as we are successful in West Monroe, which we're confident we will be, then it simply becomes a matter of studying the numbers to see if that makes sense that's stone in other places, you know. Do you have enough gray water? Is that a good alternative? We're looking at the various things. Representative Fanning has legislation in place to create a reservoir for stone in that area. But what we'll do, as we move forward then, once we see how this goes, then you weigh using water treatment versus building a reservoir, which one can you do quicker, which one can you do for less money, which one works better long-term, apply those things, and we can get through it.

I am very strong, and I'm saying that every one of my constituents and friends that I talk to that, you simply cannot -- I will not come to Baton Rouge or ask Rodney to go to Washington and lean on the citizens of the rest of this state and the other states and ask you to come solve a problem for us that we aren't willing to solve for ourselves. So we must practice stewardship, and we must work on these water systems, clean up the leakage, get the rate structures right, and what have you, and I think you'll see us move rapidly in that area.

I'm looking forward to seeing from our U.S. geological friends up there, and I want to get with him and see again -- because they monitor the test wells

and all, and begin to see, even the things -- because we've been at our little public education part now for several months. It would be nice to see if we're beginning to see anything in that area, but all that is important.

So I think that's about it. I probably took too long, but I'll be glad to take a question or get out of you all's way, whichever is better.

MR. KIRKPATRICK:

Thank you, Representative Downs. I did have a question. I was interested, you know, your discussion about the leakage problem.

REPRESENTATIVE DOWNS:

Yes, sir.

MR. KIRKPATRICK:

At the Louisiana Rural Water Association meeting, did they say the most -- talk about kind of the most common ways to address those leakage problems and the costs associated with that, or is this something that better management by the Rural Water Associations could take care of or do they need outside assistance for this, or what's kind of the nature of --

REPRESENTATIVE DOWNS:

That is a good question. And by the way, that -- this -- all of what I'm sharing with you was from a meeting that we actually had in Ruston, where they all came there to specifically address this issue.

But, first of all, the only way to know for sure to know about the leakage, according to them, is metered at the well, metered at the end user. That's

the only way to know for sure, all right.

Then, the leakage, there are a number of things that drive it. Many of these systems are underfunded. They just -- their rate structure is so low, they don't have any money. And the fact of the matter is, people will pay for water. Don't think for a second that people can't afford to pay -- and I don't want to get too carried away with this, but let me just tell you. In Ruston -- I did a little checking -- and at Super 1, a grocery store, I went out and visited with them out there, and without even going and checking his data, he tells me he can guarantee me that he's selling between 500 and 1,000 cases of bottled water every week out of that store right there. And he said, "I can tell you, Super -- Walmart Supercenter is probably selling double what I am." So -- and that's about $1.00 a bottle, or whatever they get for it. And by the way, you know where it comes from? It comes out of the Tyler, Texas, water system. They bottle it up right out of the tap, and Tyler is sending it over to Ruston and our folks are paying $1.00 a bottle for it. So don't think you can't get an adequate rate structure in place to pay for these things if you just do the right thing and put them there.

But that's -- so -- the other thing they tell us is, in a lot of cases, where they have turnover with their operators and what have you, and where they aren't keeping good data, they look up there and let's say they pumped half a million gallon -- a million gallons this month, if they don't have records -- it's

a new operator, they don't have records, then he or she don't have any way of knowing something is wrong because you've never pumped over 750,000 ever before from along the line, and so keeping these records is absolutely imperative in this situation.

So it's mainly -- it's a combination of not really knowing up until this point -- I don't want to be harsh with this -- not really caring, in other words, not appreciating the significance of it, not having any empirical data to compare it to because they haven't kept good records in the past, this type of thing. That's why we have to do each one of these steps.

Now, having said that, you may say, oh, well, then how can they estimate this kind of leakage along the line, and it's a pretty good question, but they're confident, pretty confident, in their numbers of what they're telling us. I mean, they didn't have much doubt that was accurate, right?

MR. WOODS:

Yes, sir.

MS. IRION:

Hi, Representative Hollis. I'm Karen Irion. I'm the drinking water administrator for the State, you know me.

REPRESENTATIVE DOWNS:

Yes, ma'am.

MS. IRION:

Anyway, also, EPA initiated this year a huge water conservation program, as well, and they have a lot of free brochures and data. Of course, some -- that's

targeted towards those western states who haven't got a drop to rub together at this point and they're really out of water, and we have plenty of water in most of the state, but again, the ground water systems are being depleted. We're not as bad as the Ogallala at this point with the Sparta, but understanding that we need to do population pressures to get that over -- overuse of the water.

I think that, you know, LRWA is our partners that we work with all the time on the rural water systems, and that we -- EPA also has a regionalization of systems in place to help systems, smaller systems, combine together. And, of course, out of our office, under the Loan Fund, we have free assistance for systems who are looking to -- under our capacity development program to help them get on a foot -- you know, a rate-footing basis where they can figure that out, along with the -- it's managerial, technical, and financial to help them get up and running. So our folks do help out with that quite a bit, and it's free for the systems, so, you know, you can't get that kind of an audit and that kind of -- and we also have Board member training, as well as our -- of course, our operator training that we do with LRWA.

REPRESENTATIVE DOWNS:

Right, and that's great. And I'm sure you all know that the LRWA services to the systems is also free. Now, they can't buy their new pumps for them or what have you, but, I mean, they go in there and do all their work, their testing, smoke testing, all that kind

of stuff, and that's from Federal and State funding and what have you.

Yes, sir?

MR. WOODS:

I was just going to add, one of the programs that LRWA offers to communities with small water systems is a free leak test. If you've got a leak that you can't find or you think you've got -- wasting too much or something, you can get on a schedule with us, and we'll come in and we'll find the leaks for you. And that's a free service, and that comes from the money that we come down and ask for every year to sponsor our programs. I might add to that, Representative Downs is one of our biggest supporters on that and helps us obtain money so that we can provide these programs.

REPRESENTATIVE DOWNS:

Thank you very much. I appreciate that. That's right. And what we've found out in some of the -- like I said, in my own district, looking, I saw systems on there. Frankly, one or two, I was very pleasantly surprised about, because I know some issues we've dealt with before, dealing with leakage. But in their latest tests, they've got their numbers in single digits. I'm talking about 8 or 9 percent leakage, but then, in my same district, there was one of there who had 65 percent leakage. We think that's been dealt with. They knew they had bigger problems, but they also knew we were five-laning the highway and they thought it made -- and they were going to have to move those lines, so they delayed it somewhat until those lines

got moved. So it -- that's got to the point we need to retest now. We're probably going to find out we're saving a lot of water now. I mean, I hope we're going to find out we're saving a lot of water.

Anything else?

MS. WALKER:

Yes, yes.

REPRESENTATIVE DOWNS:

Yes, ma'am.

MS. WALKER:

I'm from New Orleans, and, of course, they are having a tremendous leakage problem also with the City water system, which, of course, is surface water. But they have gone to a sonic detector to find the leaks, and it's about the size of a Coke can. They just lower in, and it -- by sound waves, they can detect the -- where the water is coming, and it detects the very large leaks. And what they have found is, although we see water on the surface where it bubbles up, but the biggest leaks are going straight down, so they're not apparent to the visible eye. And what the gentleman over here was saying about the LRWA, they definitely should be using that technology to find the big leaks.

REPRESENTATIVE DOWNS:

Thank you so much. To both of you all, are we -- is that the technology -- are we using that technology?

MR. WOODS:

(Nods head.)

REPRESENTATIVE DOWNS:

We are? Good, great. Yes, that's good. And,

yes, those things -- well, they shared a story with us of one that broke -- one that broke in a creek bed, which at the time, the creek bed was flooded and what have you, all right. Had they not had empirical data, they wouldn't have had a clue, because it's hard to see if something is leaking when it's out there in the middle of a creek. But all of a sudden, they were losing hundreds of thousands of gallons, they knew something was wrong. And when they couldn't find it anywhere on the dry land, they went to the creek, and that's where it was. It was all -- that was part of the reason the creek was rising, I guess.

MR. KIRKPATRICK:

Any questions?

(No response.)

All right. Thank you.

REPRESENTATIVE DOWNS:

Thank you very much. I'll leave it here, and you all can look at it or do whatever you want to do with it.

MR. DUPLECHIN:

Thank you, Representative Downs.

One of the findings the Commissioner made in the Order was that users of Sparta ground water shall vigorously seek alternative sources of potable water to alleviate excess uses of the Sparta Aquifer.

As Representative Downs alluded to in his presentation, there is work going on in West Monroe between the City of West Monroe and Graphics Packaging. At this time, I'd like to ask Terry Emory and John

Stamberg to come forward and kind of give a short report on the project that is going on in West Monroe to get Graphics off of the Sparta.

MS. EMORY:

I'm Terry Emory with the City of West Monroe. Thank you all for allowing us to come down here and give you an update on our projects. We're very excited about it. Mayor Norris has made this project his first priority, and he's working aggressively to get it going.

We had about a year of delay in getting the funding because of the hurricanes. I think we were supposed to get it in August 2005. We just got it this August -- or this September, but we did receive a $600,000 grant from the State for our pilot project, which will treat one million gallons of water.

Right now, our treatment plant discharges an average of 7 million gallons a day. The long-term goal will be to let outlying sewer systems connect onto our sewer system to increase our flow to 10 million gallons a day that we can treat and send back to Graphic Packaging for process work.

We've spent a lot of money. Graphic Packaging has spent a lot of money, but they -- they went to all their customers and did a survey, and everybody was excited about, you know, recycle and reuse, but they want the water to meet drinking water standards. They have about a 78-page EPA list of water regulations that they need to meet for food contact paper. So we have done a tremendous amount of bench-scale testing, and we

can take the gray water, treat it, and meet every one of those regulations.

John Stamberg has a presentation -- now, the big article that we've handed out, that was a really positive article from the paper in Ruston. It was reprinted in West Monroe by the Ouachita Citizen, but it explains the program.

John Stamberg has put together another presentation that he'd like to go over that will explain more of the technical part of it, and also how long we've been working on this; it's been years, you know, since '95 -- '94, '95. We've been working on it a long time. This is John Stamberg with Energy Ventures Analysis out of Arlington, Virginia.

MR. STAMBERG:

A carpetbagger.

MS. EMORY:

Yes. Anyway, he's a consulting engineer for the City of West Monroe.

MR. STAMBERG:

I want to take this opportunity -- I'm not going to spend too much time, Tony Duplechin said about ten minutes or he would break my wrists, but anyway...

I'll sort of go back to the beginning. The Sparta Commission -- the Commission that Meyer and Meyer, LaCroix, Hixson, we call it the Hixson Report, to do a study. What they came up with in the second page is the highest priority project was the West Monroe-Ouachita River Project, that was intended to take water from the Ouachita River, create drinking

water, and that would be 10 MGD and displace the well system for West Monroe and the suburban areas. That project, in the next page, was projected in 2002 dollars to be about $56-, $57 million. The whole Sparta project was about $200 million to solve the problem in their report. The next thing is the operating cost, which was $2.7 million for the West Monroe and suburban area, and it was about $7 million all together.

So what the Mayor of West Monroe, Dave Norris, did is look for alternatives that would be more economical, and this chart shows that. In other words, the Hixson Report indicated, which is on line B-2, that it would be about $55.7 million. Well, we think the waste water upgraded to drinking water, it would be about $16 million, so it's about one-third to one-quarter of the cost of going to the surface water for the same amount of displacement. Its operating costs are also cheaper, and so we've been pursuing that direction.

One of the things, this is a little map, the thing that looks like intestines of a frog, is the Graphic Packaging waste water treatment system. The square area is the waste water treatment system for West Monroe and the greater Ouachita Sewerage District #5, which collects the sewerage from the greater Ouachita water systems that serve those areas. It's about a mile and a half distance between it, so some of the savings is in close proximity of the two facilities, and that saves distribution system.

Real quickly, this map and -- oh, anybody that

wants more of a handouts just -- give Terry or I the handout, because there's more things in that than I can address in about five minutes. But this little area here called "Sub," the City purchased that land adjacent to its waste water treatment system to have the site for the upgraded facility.

The second piece is, before the State grant, the City -- the West Ouachita Sewer District #5 and Graphic Packaging had spent about $400 million and some odd -- or $400,000 and some odd. Graphic Packaging's effort was to get FDA approval and customer approval and do an engineering study on that. The effort with the customers said, hey, you can meet the regulations for 8 million, but the customers don't want food packaging unless it comes from drinking water. Well, if we could, for half the price, meet the water quality that they're using now, because half of it does come from the river with just alum treatment. Psychologically, we've got to go to drinking water using activated carbon or their competitors will say, lick your sewerage ice cream carton and buy it from us. So, psychologically, that's realistic, and we have to double the price to satisfy the customer and the industrial relationship.

The next page is a summary of how we're going to spend the $600,000, and added to that is the "In Kind" and previously spent efforts, so they will be about $1.2 million in this effort to do that. Part of getting there and part of the quarter million that the City of West Monroe and the Sanitary District put out

was to do a bench-scale test of the technology to prove that we could make drinking water from top to bottom, and that's what we spent about a year doing, sorting out a bunch of different technologies and sorting out cost-effective treatment plants.

There's two other places in the world -- EPA did a study throughout the world of who's upgrading waste water or gray water to drinking water qualities. Two places do it, Namibia, South Africa, which is adjacent to the Kalahari Desert. I think Angelina Jolie and Brad Pitt have been drinking this water. Two-thirds is fresh water, one-third is reclaimed waste water to drinking water quality. The other place is in Durban, South Africa, and they're upgrading the water to drinking water quality and sending it to a paper mill for food contact paper, a real parallel situation to what we're doing.

The next two pages, you can take a look at, but we've really summarized what the benefits are to West Monroe, the West Ouachita Sanitary District, Graphic Packaging, the whole Sparta region, State of Louisiana, and the rest of the U.S. There's so few of these projects that people on the fringe -- in other words, there's Pilgrim's Pride chicken, they're not going to go to recycled sewerage for psychological reasons, and so it's real. But there's going to be a lot of people in the U.S. looking at this type of project to see how it's done, its economics, and probably the first type of use would be in the industrial processes, as opposed to human drinking water. California has had a couple

of projects where they wanted to reclaim it, put it in reservoirs for 200 days, and the California just go nuts. So there's a psychological aspect to this. It's real. We're doubling the cost, and it's going to keep jobs in the area, save the Sparta, and the loss of some -- you know, urban-suburban growth in both areas. You can go over that in some detail.

The basic system is alum treatment. Two different ways of doing it, one is if it comes from the river, you've got silt, those little anchors, and you just sink it. That's what Graphic Packaging is doing with 10 of their 20 MGD's, recovering it with that. When you have an algae pond, you have no weight so we're going to dissolve air flotation, add bubbles in the aquifer, and float the material up top. Then you take the soluble material and run it through activated carbon, and it's very much like these little things that you put on a system at the households and all that, and that takes out all the soluble, organic materials, the pesticides, the small virus, and all that type of thing.

Then I've got two pages in here that's really a chronology, starting in 1995 to present, on the activities that West Monroe has been following, on the other side is the Sparta Commission activities on the same time, and then in the middle is the technologies that we looked at on the bench scale and why we, you know, narrowed it down to this. The two other projects in the world that are going to drinking water quality are using the same basic coagulation, all of our

activated carbon technology. Reverse osmosis will work, but it makes the river system at $56 million look cheap. That's a very expensive technology.

Then on the project, we've got the funds released, and this is a summary of what we've done so far. We've got the dissolved air flotations. We bought used equipment. That's been bid, procured, and on site. We just published last week bids for the pressurized activated carbon units. Graphic Packaging has donated the alum tanks and the backwash tanks. We need to store some backwash tanks that backwash the equipment every so often, so that's $50-, $80,000 worth of donations that they've provided. We're changing the electric power so we have enough power for the demonstration, and we're upgrading it to the full scale. We're being optimistic. The pump equipment, we're going to finish that design in August, as well as the site work. And then the final erection, once we know, after shop drawings of the equipment, we'll finish that design and have that on -- you know, bid in September.

The project schedule, looks like we're going to be able to start up the demonstration project in late December of this year. It will probably be a year's worth of research, probably about midway through that research we'll have a no-go decision or a decision to keep refining that. We can then make final cost estimates, get wetlands permits if we need some, there's some in that area, in that purchased land that is probably going to be wetlands and we'll have to

address that minor problem. And then that's a good time to address the business arrangement, the funding arrangement, and all that. Once we know what it's going to cost, then we can figure out how it's put together as a package to benefit the Sparta, West Monroe, the State, and everybody else. The start of construction can be as early as January 2008, and could be full scale, online in January 2010.

Then there's another subtle thing that you run into with the Sparta, not only the quantity of water but the quality goes downhill, and the best way to look at that is the regulations for trihalomethanes and haloacetic acids or disinfection by-products. And really, what they are is, when you chlorinate water that has some background Lignin, Tannin, and those type of chemicals that you get from the ground water that's been there since dinosaurs first took a dump, okay, that water has no background chemicals. When you chlorinate it, you break off both methane and acetic acid type of compounds, that combines with chlorine, and more importantly, the bromine. And what you have is, when you get sodium in there, you're also getting bromine, and it's in the form of a salt bromide, but when you put chlorine in there, it changes it to bromine gas, and that reacts with the methane and the haloacetic acids. In West Monroe, 90 percent of the trihalomethanes, are bromine compounds, okay.

Then in the final slide is sort of the history of one of the wells there. In '94, the color, which is really the reflection of the Tannin, Lignins, and those

kind of compounds, so it's 5, and now that's gone up to 35 to 40 recently. Sodium wasn't well measured on all the wells, but this well it was, that's been increasing. And more importantly, the bromide that goes to bromine that goes to the trihalomethanes has been increasing. So the City also has a problem with solving their trihalomethanes, and I think there's 135 other communities in Louisiana that are fighting the trihalomethanes for the same reason. So the salt just isn't the salt problem from the sodium standpoint, it's the trihalomethanes and those type of things, and there's a lot of expense in doing that.

So that's the basic thing. Anybody that wants some of these handouts, give Terry or I your name, and we'll get you a copy of it. If anybody has any questions, you can ask me now or afterwards.

MS. IRION:

I have a question. I'm Karen Irion, again, with Department of Health and Hospitals; I'm the drinking water administrator. Karen, you might answer this, too. By the way, Karen Gautreaux with DEQ is here. She snuck in.

The term "gray water" that you've been using, I'm not sure if that's correct terminology. "Gray water" refers to water that's not sewerage-related; that is from sinks, bathtubs, and laundry facilities. This looks like entirely sewerage water that's been partially -- or treated or partially treated; is that correct?

MR. STAMBERG:

I was educated as a sanitary engineer with waste water effluent.

MS. IRION:

Waste water effluent or treated waste water, but I keep seeing the term "gray water," so I don't understand why that's here.

MR. STAMBERG:

Not my term.

MS. IRION:

Okay.

MR. STAMBERG:

Not my term.

MS. IRION:

Okay. But it could be confusing to people, because there is a gray water discharge, too.

MR. STAMBERG:

The EPA, in their reuse document, uses "gray water" or "disinfected sewerage effluent."

MS. IRION:

Yes. That's not a good terminology.

MR. STAMBERG:

There's a lot of that terminology thrown around. I'm not sure that that's the whole gray water concept. Gray water tends to be shower water and those kinds of things --

MS. IRION:

Right.

MR. STAMBERG:

-- in my terminology.

MS. IRION:

Right.
MR. STAMBERG:
The EPA uses disinfected waste water effluent.
MS. IRION:
If they used that in their guidance document, they were incorrect. But the fact is, is that we have color-coding for reused waste water, and it's purple. So if you do transport waste water in pipelines for reuse purposes, it needs to be color-coded appropriately. And I just wanted to point that out, that's in our code, and --
MR. STAMBERG:
Yes.
MS. IRION:
But I just also wanted to make sure that it was clear, because it could be very confusing to people. There's a big difference between treated waste water and gray water.
MR. STAMBERG:
The City of West Monroe uses waste water effluent.
MS. IRION:
Right, treated waste water effluent.
MR. STAMBERG:
The press uses the term "gray water." I don't think that's consistent with the way I talk. I don't write the articles. The article, in general, is good, but if you look at our --
MS. IRION:
So, really, the --
MR. STAMBERG:

-- water quality from a color tri -- we had zero trihalomethanes and haloacetic acids in our water, okay. It's a better water -- if you looked at the datum from our bench test and what Graphic Packaging and what the Sparta is, you'd choose the treated effluent, until you found out where it was from, then you'd go, yuck.

MS. IRION:

Well, yes, but the treated effluent is going to -- if you're going through RA, the treated effluent is going -- but I just -- Tony, we have the heading on there as "West Monroe Gray Water Project." It should be "West Monroe Waste Water Reuse."

MR. DUPLECHIN:

And that is correct, and we will make an amended agenda to correct that.

MS. IRION:

All right. Thanks. That was my comment.

MR. STAMBERG:

Is there any other questions, comments?

MS. GAUTREAUX:

I'll just make a comment. I think this is incredibly encouraging. I remember when we were discussing the originations and the reason for the Task Force and the Commission's existence, there was a lot of talk about alternatives, and I think it's wonderful to see this potential alternative coming to fruition. We've heard about it in the works for quite a while, so I'll be looking forward to keeping updated with your progress.

MR. STAMBERG:

Thank you. Worldwide, the key to this is Graphic Packaging, okay. People don't have to drink it. They just have to eat Ben and Jerry's out of the cartons, and psychologically -- no, I follow this stuff, and the psychological impasse is real. We're spending another $8 million because it's real, okay. And so the Graphic Packaging, their cooperation, and their enthusiasm for this project, God bless them.

MS. IRION:

Well, from an engineering point of view, there's -- all water is reused -- or most water is reused, and especially any surface water, so, you know, from an engineering standpoint, we understand completely, but we also understand the psychological implications. But I agree that the project is great, so...

MR. STAMBERG:

People will take the Ouachita River, three days from the sewerage effluent fight in Arkansas, and have no problem. It's -- in the waste water treatment algae ponds, 30 days, okay. So nature has ten times as much effort working on that water, but it's psychologically there.

MS. IRION:

Well, there are cities like El Paso and some places in Georgia where they actually are putting -- reusing waste water and putting it back into the drinking water programs, so it's coming to a lot of places that are strapped for drinking water.

MR. STAMBERG:

We'll see more of this.

Anything else? If anybody else has any questions, just tap us on the shoulder after the meeting.

MR. KIRKPATRICK:

Okay. Thank you all.

All right. Tony, let's go down to next item on the agenda.

MR. DUPLECHIN:

Thank you very much.

Our second item under "Old Business" was an update on the proposed language for regional water advisory groups. At our last meeting in June of last year, there was some confusion as to what the status of that proposed language was, and what had happened was, we had decided -- we, being the Office of Conservation, to wait until the end of that session, legislative session, that was in at that time before moving forward with this. And unfortunately, the storms hit us, and we kind of didn't move forward with it as quickly as we had hoped.

What I would like to do, at this point, I have included our most recent version of the language in the Commissioner's packets. I would like for you to take this back and review it, and I have copies available for the rest of those in attendance. And for those Commissioners that are not here, we will be sending them a hard copy. Review it and we will move along with it at the next Commission meeting, if that is okay with the Commissioner.

MR. KIRKPATRICK:

Tony, I'm looking for it in our package.

MR. DUPLECHIN:

It's under "Notice of Intent Office of Conservation Ground Water Resources Division."

MR. KIRKPATRICK:

Okay. Yes.

MR. DUPLECHIN:

Two columns.

MR. KIRKPATRICK:

Third to the last page in my packet.

MR. DUPLECHIN:

Okay.

MR. KIRKPATRICK:

Okay. Great.

MR. DUPLECHIN:

Okay. Moving along to new business, I'll give you a brief update on legislative -- legislation that affected the Commission. Act 29, which was introduced as House Bill 368 by Representative Damico, cleared up some of the language that had been changed the previous session concerning critical ground water areas and areas of ground water concern. There were two places where "area of ground water concern" did not replace the phrase "critical ground water area," so, basically, that's all that Act 29 does.

Act 30, which was introduced as House Bill 372 by Representative Damico, changed the meeting frequency of the Ground Water Resources Commission from once per calendar quarter to twice per calendar year. That still says that the Commission may meet more often as

necessary.

The next item under "New Business" is a panel discussion from representatives of DOTD, DHH, DEQ, and U.S. Geological Survey about the effect of Hurricanes Katrina and Rita on Louisiana's ground water resources. So, at this time, I'd like to ask Howard Fielding from DEQ, John Lovelace from USGS, and Karen Irion from Department of Health and Hospitals if they want to, to come down to the table here. Brad Hanson, who was going to give the report from DOTD, had an accident yesterday, and he's at the doctor's this afternoon having his knee looked at, so I will be taking care of his presentation.

If the Commissioners could turn around and look up at the screen and follow along.

This presentation is part of one that Brad made to the Recovery Team with LRA concerning the effect on water wells. The problem that was determined was that well heads damaged by the two storms resulted in open holes, and over time, that would lead to aquifer contamination. He looked at information that DEQ had and the data -- damage assessment that they did in the field on 68 wells and compared that to some of the information that DOTD had in their database.

Issues at hand were how to notify property owners of the threat to the water supply, both in surface water inflow in these and -- into these open holes and hazards. DOTD mailed out letters to 480 identified property owners as a result of this.

This map shows the areas where the storm surge

reached up into Louisiana from Hurricane Katrina and Hurricane Rita. Now, this graphic is a little bit difficult to read, but what it shows is that, in the areas affected by Hurricane Katrina, were approximately 1,698 wells that were in the areas that were possibly inundated and had wells that could have possibly been damaged by the storm. On the southwest side of the State, 1,884 wells were within the limits of the inundation from Hurricane Rita.

So approximate -- almost 3,600 wells were identified. And the question remains, are there any others? Prior to 1984, wells were not required to be registered with the Department of Transportation and Development, so there's a good likelihood there are many, many more wells in these areas that have been damaged. We have to determine how many wells have been -- have sustained damage, and of those, what type of damage has occurred, and need to look into how to protect the local aquifers from any further damage.

Phase 1 would be to institute a damage assessment program. This would include identifying the production well locations by parish, DOTD data files augmented with local knowledge, and will require extensive parish cooperation and coordination. We then need to assess the amount and type of damage sustained; develop protocols for damage assessment, repair, and procedures; rehabilitation versus plugging and abandoning of each well. It may not be necessary to plug and abandon and reestablish each well. Some may just need some work to get them back in order. And all

of this would require a site visit to each well that's in the database. And then we would need to implement temporary, short-term corrective actions, which would include placing an initial temporary cap on each well which would reduce further damage to the aquifer, and more than likely, require contact with the property owners.

The estimated cost of this project is $700,000, that's at $200 per well. Brad looked at the information from all the wells that were identified and came up with an estimated total linear footage of 1,268,856 feet. And the cost to plug and abandon this -- all of these wells, at $4.00 a foot, would be approximately $5.1 million. Unfortunately, this work would not qualify for Community Development Block Grant Funding under LRA. And I may state a little bit further beyond this, we have made -- we, being the Action Team, have made a suggestion to LRA to find some way to fund the initial part of this project, which would be the field work, to go out and visually locate every well and determine what amount of damage was done to that well and what it would take to rehabilitate the well.

Any questions?

(No response.)

Okay. I'd like to ask Howard Fielding from DEQ to come up.

MR. FIELDING:

Good afternoon. I'm Howard Fielding with DEQ, and we got involved with Hurricane Katrina in terms of

ground water sampling north of Lake Pontchartrain and also down where Rita struck.

We want to determine the inundation of water wells on the north shore of Lake Pontchartrain, and some of the parameters we were looking at were water quality, dissolved metals, nutrients, VOCs, and bacteriological, and this is what the Team was looking at. And the Team consisted of people from Louisiana State -- LGS Survey, and I think Thomas is in the audience today. That was a three-man team, and they were looking at bacteria, metals collections and analysis, and they compiled wells from the well registry from DOTD. Then the USGS, it was also a three-man team, with John Lovelace, present today, and he'll talk later. But they were looking at bacteria, also, clean metals, field parameters, the collection and analysis. They had field equipment for taking samples, and they put together the preliminary well selection. And from DEQ, we also had a three-man team -- or two-man team and a one-woman team, I should say, and we were looking at field parameters, water quality indicators, metals, VOCs, and we provided field equipment for taking samples. And the analysis for us was done by the LDEQ lab.

This shows the wells that we sampled north of Lake Pontchartrain, going from the northwest to the southeast along the eastern -- northeastern shore of the lake.

DEQ was involved in the sampling of 14 wells in September and October, we didn't do bacteria, and we

did not find the drinking water standard maximum level exceeded when we finished with our final sampling. We didn't detect any volatile organic compounds in any of the wells that we sampled. We did have a problem with one well, which is the most southeasterly well, near the Rigolets. The unpurged results showed elevated components that indicated that the well had taken the surge and surge waters were in the well, but it also picked up selenium, which is a metal. But after the well was purged and resampled, it was at normal levels or non-detect. So there were bacteria problems, but John Lovelace was sampling for those with USGS, and he'll discuss that part of it.

Then DEQ continued sampling over in the Rita-affected area. We sampled in Calcasieu, St. Mary, and Vermilion Parishes in December of '05. Two Vermilion Parish wells were re-sampled in February '06, and the analytical data showed elevated levels of calcium, sodium, and again, selenium showed up, total dissolved solvents and suspended solvents and specific conductance. At any rate, what we were seeing were indications of salt water in these shallow coastal wells all the way across. Selenium was exceed -- had an exceedence of the MCL in two wells. They were two adjacent wells originally reported Selenium at 44.3 ppb and 50.4 ppb, whereas the MCL for Selenium is 50 ppb. Strangely enough, upon re-sampling, the results were even higher levels of this metal at 60.3 ppb, with -- over an average of two samples, and 71.5 ppb. So the well owners were notified of the exceedence of the MCL

and what the health effects are. We didn't detect any VOCs in any of the wells sampled. We didn't collect bacteriological samples, and we were sampling Rita alone. USGA, the survey, were not involved in the sampling effort.

Another part of our project in terms of ground water were releases, and we were particularly interested in source water protection areas. Because, in addition to an end being ground water monitoring program state-wide within the aquifer section, we also are interested in protecting drinking water, and the source water protection area is a certain area carved out around a drinking water well deemed viable for protection from contamination.

What we were interested, in particularly, were above-ground storage tanks carrying petroleum products or other chemicals that may have been released as a result of hurricane and, in particularly, close to drinking water wells. And we found three tanks on the north shore of Lake Pontchartrain and 12 in the Rita area, and we reported these to the Surveillance Division of DEQ for further investigation.

Also, as we were out sampling, we started to notice sheared off wells that were just opened at the surface, and we located 68 private damaged drinking water wells with potential for aquifer contamination, 25 in the Katrina area, and 43 in the Rita area, and these wells were reported to DOTD for further action, because that falls into their area of jurisdiction.

This is an example of a spill from a tank in the

Katrina area. And here's another one, the tank has just been moved from where it was originally and ended up here, and it had a petroleum product in it and it's leaked in the ditch, as you can see. So we GPS these things so that when we reported these to the Surveillance Division, you know, they would have the coordinates.

Now, some of the wells that we were looking at north of Lake Pontchartrain, in the next two or three slides, here, we're GPS-ing a well, and this is a close up of the well and it's opened at the surface, as is this one, just some samples of the type of things that we found. And someone tried to cap off this well with a water bottle. And as we go into the next hurricane season, we've ordered a bunch of plugs for the various type of diameter pipe that we were dealing with in order to plug these open holes on the spot and try to protect the aquifer. So we -- that's a lesson learned from these hurricanes that hit south Louisiana.

That concludes my presentation. Are there any questions?

(No response.)

MR. LOVELACE:

Thanks, Tony. I'm John Lovelace with U.S. Geological Survey. Some of the information is going to be a little bit redundant with Howard's, the same sampling effort, but I'll go through -- I'll try and go through it fairly quickly.

As Howard said, USGS, LGS, and DEQ folks were out sampling wells after the storm. Just to show you

really why we were out there, you see, the north shore area, everyone knows, is pretty heavily damaged, but the storm surge was up to 16 feet in this area over here, southeast of Slidell, and as much as 7 feet over here in Madisonville. So levees were overtopped in this area, and a lot of wells were literally washed away with houses and other structures.

As Brad Hanson reported, there were approximately 1,400 wells in St. Tammany Parish within Katrina's surge inundation area, and these were the registered wells, these were the ones on the books. There are probably a large number of wells out there that aren't on the books. Most of the wells are going to shallow, small-diameter, domestic wells. When the surge hit them, typically, it broke away their pressure tanks and most of the other plumbing and broke the cases, leaving a lot of the wells open to the environment.

Surge water may have gone into the wells, especially the shallow wells. The deeper wells weren't really a problem, because most of the deeper aquifers in that area have water levels that are above land surface, that is, they flow at land surface, so if the casing was broken, there would just be a little fountain there. The water coming up would prevent most of the surge -- really prevent surge water from going down into the casing.

It's kind of hard to see here, but this is typical of what a damaged well looked like. I mean, you can see ruin all around the area, and it's just a pipe sticking up at this point, little one-and-a-half-inch

pipe. They're completely open.

Let's see. We went through what we were sampling for, and that is the area we were looking at. Interesting change to the dots that I had up there, fonts do funny things sometimes. We sampled 13 wells, 12 of which were in the inundation area.

Originally, when we went out there, we had picked a bunch of wells we were going to go sample, but the reality in the field was, we ended up going places where we saw people working, so we figured they had -- probably had a water supply. So we didn't sample too many wells that were not already -- had already been repaired. We wanted wells that had a pump in there, that they were using, and in a lot of cases, they had already disinfected them with bleach. So there were -- seven of the wells that we sampled were registered, and their depths range from 250 to 460 feet. Five of the wells, or a little more than a third of them, weren't registered, so it'll give you an idea, this is a random sample of how many might not be registered out there, probably a third.

That's just a cross-section showing -- the wells were in the upper Ponchatoula or Gonzales, New Orleans aquifers. Typically, the domestic wells are going down to the first good-quality water and they stop there. Although there's 2,000-plus feet of fresh water in the area, they stop within the first couple of hundred feet if they can.

This is another typical well. It was completely covered with mud and debris. The well owner was out

there. He was getting ready to disinfect it. He had his handy bottle of bleach right there. He was getting ready to get on with things, cleaning up his house.

This is another well that was at a boat ramp. There had been a little lounge across the street. There was nothing there now, except a bunch of scattered, broken pots and pans, dishes. The sanitary seal was still on the well, but all the plumbing was broken off. Here's the filter sitting on the ground over here, and you could tell that a bunch of debris had gone down into holes on top of the sanitary seal and into here. It was just full of mud and vegetation. We originally pumped this well with a little peristaltic pump that Louisiana Geological Survey had brought with them. We were pumping straight salt water off the top of it. It was very high chloride and specific conductance. The guys went back out a little bit later and hooked it up to a -- hooked the pump up to a generator. The wires were still sticking out of it, and the submersible pump still worked. And they were able to purge the well, and it returned to fresh water, completely fresh water, at that point.

This was another small-diameter well that had been broken off. It had been repaired, a little quick, temporary fix. They had run it to a small pump, and they were powering a hose just so they had water while they fixed their house.

This was another well that had been completely repaired. There's two brand new pressure tanks out here, it's in the fellow's front yard, and we did get

hits for bacteria out of this well. And talking to Thomas Van Biersel earlier before this meeting, he has been re-sampling this well and continues to get bacteria hits since the storm.

So out of the 13 wells we sampled, we had two that had chloride -- high chloride and specific conductance indicative, but salt water had gone into the wells. Neither of the wells have been used since the storm. They've both been damaged. And two wells also had hits for bacteria, one of which was one of those that had a high chloride problem.

This was basically a little preliminary reconnaissance sampling. Our general conclusions from it is that the aquifer is not contaminated; any contamination was local, at the well; because the storm only last -- the surge lasted only a few hours, a limited amount of water could really have gotten into the wells and would have a short-term effect. Most of the wells, when we sampled them, were already in use and they had probably pumped out most, if not all, of the water -- the surge water that had gone down into them. However, they're -- because damage in some areas was catastrophic, there are probably a lot of open holes out there, open wells, that are going to remain open for an extended period to potential contamination.

And that was it. Any questions?

MR. KIRKPATRICK:

I have just one question. You mentioned if the -- there remains openings to the -- if the tops remain off of these wells that a potential contamination could

occur. Any idea how large of a problem that would need to be before you would see some impacts to the well? I mean, I see where it looks like maybe a third of the wells aren't registered, and, you know, so I -- it's going to be hard to locate all those wells. Is that a -- do you all see that as a potentially serious -- potential problem, or --

MR. LOVELACE:

Well, it depends on how big the hole is and, you know, what contamination is close by. As Howard pointed out, there were some serious spills in some areas. Over near Chalmette, there was a pretty good spill, oil spill, near a plant. Now, they got out there and cleaned it up pretty quickly, but, say, if an irrigation well over in the Rita area, which is an 18-inch hole, if it was sheared off at the -- at ground level, and out there in an area that was constantly inundated by flood water, stuff will continuously go in there. If it's near a field where they're irrigating, irrigation water will go down there. That's probably not going to move through -- anything that goes down there won't move through the aquifer, but it could create a little local problem around that well. And if there was enough out there, it could make a larger problem. Say, over in some of the homesites, say, if there's contamination going into the well on an ongoing basis, that could contaminate the ground underneath that homesite for the aquifer.

MR. KIRKPATRICK:

So by contamination -- I'm just not sure how

sensitive these aquifers are to kind of, quote, contamination. I mean, certainly, if you've got an oil spill, that would be a very bad contamination, but, I mean, surely, if they're getting some mud and dirt and some regular rainwater down in there, is that a --

MR. LOVELACE:

Not really that much of a problem.

MR. KIRKPATRICK:

Not a problem, okay.

MR. LOVELACE:

But if there's broken sewer lines and other things around, you know, stuff got moved all around, people's, you know, household pesticides and what not, things that were stored out there close to the site, oil and chemicals, who knows.

MS. IRION:

And if you've got a group of housing developments where you've got a minimum distance between wells and sewerage plants and they're all sheared off, you might actually get some contamination there. Because even if they drill a new well, they might be picking up -- you know, once they start pumping, they'll pull any contaminates that are in the immediate vicinity into that well, as well. So, yes, if you get -- we're talking about cumulative damage. You start putting it in an area and you start trying to rebuild in that area, you might still have that problem.

MR. FIELDING:

Also, these open holes, if somebody got -- decides to dispose of something down that open hole, then

you've got the aquifer contaminated immediately, particularly, for instance, if they were changing the oil in their car and they thought that this is a nice place to dispose of it, then you've got a real problem.

MS. IRION:

There are really thick clays in between most of our water layers in Louisiana, for the most part, and it protects our aquifers. But when you drill a hole, you make a direct conduit into the aquifer, and anything that goes down there is going to get into it and it's not coming back out.

MR. FIELDING:

It's very difficult to clean up once it gets contaminated.

MR. KIRKPATRICK:

Thank you. Any other questions?

(No response.)

MS. IRION:

This is a fire hydrant in Cameron Parish after the storm. All right. If you look at the well that's up in the upper corner, that's Lake Catherine Community Center, that's out off Lake Bruin. And the Lake Catherine community is actually no more, and that's one of those sheared off wells. That's a public water system, as opposed to domestic wells.

Before this, we've just been talking about domestic wells. Public water systems are any systems that are serving 25 or more customers or has 15 or more surface connections, so that's the Community Center at Lake Catherine, and it's no longer. The whole

community is gone.

There, you see a standing water tower after the storm surge has passed. A lot of the water towers did stay in tact. This was at Oak Harbor.

This is typical -- what happens at most of the public water systems that the took all of the -- out the buildings, this is a well. The Louisiana Rural Water folks got out there and really helped a lot of people rehab their wells. Again, what we do is purge -- if they're operational, we get them operational and put new pumps on them if we need to or new generators. We pump them -- they purge them, and then they chlorinate before we take samples.

This is the water tower at Buras in lower Plaquemines Parish. All of the water systems down in that area are no longer in operation.

So some of our systems that got hit really big by the tidal surge, like anything along the coastlines, and then, of course, in Cameron Parish, the lower Vermilion Parish, we destroy -- we deactivated 60 of them. Most of these are like little stores, so they're called non-community systems, because they don't serve a household, but -- so we deactivated, because we did have 1,591 systems when we first started, before Katrina.

In all, we issued boil advisories on 1,350 of our total of 1,591 systems, so you can see that pretty much everybody, at one point or another, was affected by this storm.

Okay. Even though we had a lot of damage to

ground water system, the big population hits were, of course, on our surface water systems. We have about 5 million people in the State, and as you can see, about a tenth of them were affected by the -- permanently, pretty much, by the loss of drinking water. In fact, we got everybody -- all the public water systems are back in operation, except for those 60 we deactivated. A few, like lower Plaquemines and the lower 9th Ward in New Orleans, are still under boil advisories.

One of the big problems for the drinking water in Louisiana is, we had a very great state-of-the-art, one of the best labs in the country, but it was in New Orleans. It was on the 7th and 8th floor of the DHH building. We thought it was going to be okay, but the building is pretty much a loss and the lab is gone. We've been salvaging equipment from it. Of course, our radioactive counters were in the basement. And we're tried to put up a new lab in Metairie right now. Its temporary lab date opening is in November.

We haven't been able to do a lot of chemical sampling, but we kept up with lead and copper sampling by sending a lot of samples to the EPA lab in Region 6, and we also -- they took some other lab -- some arsenic samples and stuff with the new arsenic rule that kicked in in January, and we have contracts now with Arkansas and Texas where we're starting to ship samples, as of July 1, to them to do to keep up with our every three-year or every one-year chemical sampling.

We did run around to the large surface water

systems when they came back on line and take some -- did some limited sampling and sent that off to EPA Region 6 just to make sure that they weren't putting out anything that we didn't -- that might put them in violation of safe drinking water program maximum contaminant limits.

Like you said -- everybody knows what to do when they said people were out there cleaning their wells and disinfecting and purging. They know what to do, okay, except for -- you're not really used to -- usually, we're just used to flood inundation and putting it back in operation with minor repairs. We're not used to a 30-foot tidal surge which just takes everything and it's brother away.

But what we did is, EPA brought in two mobile bacti labs, because we also are -- one of our -- we have four bacti labs in the State, Lake Charles, Amite, which is on the north shore, Shreveport, and New Orleans. Now, of course, the one in New Orleans is no more. And Katrina knocked out our Amite lab for a couple of weeks, and then Rita came along and knocked out our laboratory, and you only have a 30-hour holding time when you sample, you know, so getting everything to Shreveport was not an option. So we had two mobile labs that came in from the EPA and they were in within the first two weeks, and between those and getting our other labs back on line pretty quickly, we never missed a beat on the bacteriological sampling. We were able not only to sample the public water system wells, which we -- and get those back on line as quick as possible,

but we were able to pick up issue orders and have people bring in their domestic water samples after they've flushed and purged their wells. And we created a website so they could go on and look at their samples, since communications were dismal, still even a month after the hurricane. So we were able to keep up with bacti and with the lead and copper sampling and some of the other analysis that we need to do.

An overwhelming issue for my department has been the FEMA trailer parks, and their really poor construction. We've been working with FEMA to try to make sure that they at least do some protection of public housing safety. We also have to deal with another group of FEMA people that are in a totally separate area that are rebuilding offices and schools and putting in modular systems. We've very, very particular about bathrooms and other things in schools and making sure that they're safe for the children, so we're having to spend a lot of time trying to make sure that those things get built properly.

We used a combination of EPA stats. We actually had some other volunteers too from -- Federal staff volunteers and then, of course, the Louisiana Rural Water people, and we did huge sweeps on the north shore and in the Cameron Parish area and the affected Rita areas to get to these small water systems and check them out and try to give them some assistance when we could. We ended up doing more than 600 systems all together, and we felt pretty proud of ourselves for getting to that many. Because you couldn't call them

on the phone; there wasn't anybody there.

We've got a lot of challenges now. Of course, a lot of our -- almost all of our income depends upon our $3.00 fee that we get from the water systems for connection, and we've lost a lot of connections, so we're really not sure in the next year how that's going to go. We do have a lot of increasing EPA regulations, with no increasing budget, so we're looking at -- we've been passing off a lot of the analysis we used to perform for small systems off onto them, and they're also increasing. They're looking at $40 million increases to all our systems over the next couple of years for new EPA regulations. And we have a lot of lost staff right now. We lost more than a quarter of our staff, which wasn't very big to begin with, and we're looking at not being able to hire most of those back because of budget constraints. But we're working with our water systems, like we always do, and doing more with less, like we always do.

I don't know if anybody has any questions. But in all, the water system came through pretty well, you know. A lot of the sewerage plants got totally destroyed, but people stayed with their water systems and kept them up and running. We did find out in a lot of those small systems, though, people were evacuated out of state, including the operators and the board members, and there was nobody to operate some of the water systems. That's something we're trying to address with LRWA and with a group called LaWARN, which is utility-to-utility assistance that we have to deal

with in another major event. But we never had an event like this, but we did pretty good, I think, overall.

Anybody have any questions?

(No response.)

MR. KIRKPATRICK:

Karen, thank you all.

Anybody have any questions about those presentations?

(No response.)

Okay. Well, we're to the point on the agenda where any Commission comments that we might have about anything, anybody with those?

MS. IRION:

It's nice to see everybody, again.

MR. KIRKPATRICK:

Right. Any members of the Task Force here who have any comments, you're welcome to come up now.

(No response.)

Seeing none, we'll move to the public comment period. Anybody in the audience have any public comments?

Okay. I'm sorry. Go ahead.

MS. WALKER:

I did have a question. I was wondering, considering all we were just listening to that, especially, particularly, on the north shore, as these homes and businesses are being rebuilt, is this maybe not an opportunity to maybe get those unregistered wells on line as they go through a building permitting process, that maybe that be put in in -- you know, as

they get a building permit to rebuild or whatever, that if they have a well to make sure that it's registered; would that maybe be an opportunity here?

MR. KIRKPATRICK:

Tony, what is the law on that?

MR. DUPLECHIN:

I --

MS. WALKER:

You know, would the local -- would the local --

MR. DUPLECHIN:

If I could ask Bo to answer that question, since I think --

MS. WALKER:

You know, just put a line on the permit application?

MR. BOLOURCHI:

I'm Bo Bolourchi. I've heard today a lot of comments in regard to unregistered wells. My experience is, I believe it when I see it. It's a good number of times that wells may appear to be unregistered, perhaps the owners had changed, perhaps the lot number may not be correct. This includes five years ago those wells that reported unregistered by some of the agency's staff. It's simply not being able to completely go through the data and cross reference, et cetera. Having said that, there is no doubt in my mind there are some unregistered water wells, especially domestic and irrigation wells, the pre-1976.

Also, I heard today that the wells started to be registered in 1986. Well, that is not exactly correct.

The main registration started December 1976 for the large, industrial and public supply. In 1986, the revised rules extended that requirement to all wells, including domestic wells.

But as far as reregistering, I believe, especially in St. Tammany Parish, that's required with the St. Tammany Environmental Commission.

MS. WALKER:

Okay. That's already on the -- on the --

MR. BOLOURCHI:

Right, that is correct.

MS. WALKER:

Okay. It might be something to make sure that that happened.

MR. KIRKPATRICK:

Bo, it's your understanding that that might be a decision made by -- in St. Tammany, that you would have to register that, but that would not be a statewide requirement, that would be each locale that could make that decision on their own?

MR. BOLOURCHI:

Any wells drilled, domestic wells, prior to 1985, the law did not require to be registered. You can't force them to register. We recommend they register. All the water well drillers, they recommend to register. In fact, they do register.

And while I have the floor, I may just extend a thank you to all Louisiana water well drillers. They're the one we don't hear a whole lot about them. They worked 18 hours a day on this, 30, 40 days after

the hurricane. They upgraded thousands of water wells and chlorination and that type of things. So this is something that we all need to work together to try to resolve that issue.

MS. WALKER:

I had another question, also. I recall reading in the paper not too long ago the impacts of the salt water from Rita on the Chicot, and I was wondering if we had anything on that?

MR. DUPLECHIN:

That is not something that we have investigated as the Ground Water Resources Division. I know that LGS and USGS and DEQ have been doing work out in the field right after the storms came in. But as far as the Office of Conservation, we have done no work with that.

MS. IRION:

Linda, I think it's mainly surface, like surface soils and things that were impacted by salt water, not so much the aquifer itself; is that correct, Karen?

MR. DUPLECHIN:

I do know a lot of the storm surge in southwest Louisiana was trapped once the storm passed in the fields, because of the barriers that they put up to keep the water out, wound up keeping the water in.

MS. GAUTREAUX:

At the LRA Task Force meeting, we did have a presentation by a scientist from the Ag Center, although I can't remember his name right off the top of my head, but he actually gave us a presentation, as mentioned already, about soil concentrations of --

resulting from the deposits of the salt water onto areas that usually don't get salt water, but he -- there wasn't any specific mention of impacts to water supply that I heard, but we could always check in and see if they have any information, as well. I think USGS, LGS, and others probably would have a water impact, but we could also, if there's interest, maybe get a copy of the article about the soil deposits and the impacts on, primarily, agriculture.

MS. IRION:

Also, Linda, we generally have ordinances passed in every parish just about that require bacteriological and chlorine sampling of the wells before they're put back in -- before they turn the electricity on at the place and, also, that the sewerage plant be working.

Our only big issue is, every once in a while, a constituent will go to their legislature and try to get them to try to bypass that rule, and it's an extremely good rule. And so a lot of people didn't want to put their sewerage systems back into service, especially after the storm, or rehab their systems because they said they didn't have enough money, but to let the legislators bypass that would be a crime -- be a shame, I think, because it is a protection for both the citizens and the environment.

MR. KIRKPATRICK:

Representative Downs.

REPRESENTATIVE DOWNS:

Given the -- given what I heard was the problem with the -- all these unregistered wells is because

we've got some law that says you didn't have to register them before '85, why don't we amend it? Why wouldn't you want them all registered? Why don't you ask your delegation there that suffer all these problems to do that for you? I mean, you say it creates a big problem. Some of them are probably contaminated, and we don't even know where they are. Is that what I heard?

MR. KIRKPATRICK:

Any thoughts about why that '85 -- I guess they didn't want to -- the law to apply retroactively. That's generally the basis why they set that '85 date?

MR. BOLOURCHI:

The law said -- obviously, when you pass a law, the economic impact is the key. Back then, of course, they said the large wells. That was easy to say and easy to get it done. But if you talk about 200,000, let's say, domestic and irrigation wells, now we're talking about economic impact.

MR. KIRKPATRICK:

Impact from fees from -- registration fees?

MR. BOLOURCHI:

Just looking for them, just going out and trying to locate them --

MR. KIRKPATRICK:

To enforce the --

MR. BOLOURCHI:

-- to enforce it. It's a great idea, Representative Downs. Perhaps maybe you'll want to consider introducing legislation with funding.

REPRESENTATIVE DOWNS:

I'll bring it up, because you're concerned that they're contaminated and you don't even know where they are. It makes sense to me.

MS. IRION:

And we really could use the money, if we had any, and what everybody has been trying to work towards -- what we're working towards, the Louisiana Recovery Authority, is if we could P&A some of these broken or abandoned, you know, it does seal off the conduit to the aquifer, and any money that could be found to do that -- I actually gave a talk to the Center for Disease Control on September 11, 2001, right in the middle of everything happening, that addressed just that situation and a request to get money, funding, to see what kind of P&A.

MR. BOLOURCHI:

I agree with you, contaminated wells should be addressed, but now we're talking about a private well at a private property. I don't think we, as State employees, can go on someone's property, use the State funding, without authorization. And secondly, I think the first thing we have to do, assess where they are, how many, and what the problems are. Karen, you all did -- after the hurricane, 1,100 domestic wells were sampled for bacteria in EPA mobile labs in the north shore area. From 1,100, only about 10 percent showed bacteria, and half of those, the first time it was chlorinated, they were gone.

MS. IRION:

That's right. I mean, we really train people and do a lot of publicity on how to get your well back in service, and these are the ones, though, that knew what to do and knew to take their bacteriological samples to their parish health units, and there are people that just put their well back into service without doing any of that. But, you know, we do work very hard, and I think the media helps us a lot, because they post those "How to Recover Your Well from the Hurricane" on their websites, even before hurricane season starts. So we do have a lot of good publicity out there, and I think that both our public water systems and our domestic well owners are well trained on how to recover from a hurricane.

I wasn't saying that we need to go on private property involuntarily. I was thinking about that as a voluntary program where if somebody had a broken and abandoned hole and couldn't afford to fix it, we could tap into a fund to help that well P&A'd.

MR. BOLOURCHI:

I think perhaps, Representative Downs, if there was a funding -- if there was a funding that was set up that using the fund to look for abandoned or broken wells, getting fixed, I think, could get done a lot quicker. It really is a fundamental question. Is it recovery? Is -- taking care of the wells is part of the recovery of a general area. I mean, if you have mountains of debris on someone's lot, how much money do State employees or the State can actually spend to remove all that to look for a well? It really is the

recovery question, and I think it's coming where we will get there. But funding always would help.

MR. KIRKPATRICK:

Okay. Any other questions or comments?

(No response.)

No public comments?

MR. COLEMAN:

Commissioner?

MR. KIRKPATRICK:

Yes.

MR. COLEMAN:

If I may, I'd just like to thank Representative Hollis Downs for coming and being so well -- for coming and being so well informed. I kind of felt like a Baptist sitting with him preaching and I wanted to say "Amen," because so much of what he was saying was -- I really believe was right on target. And it's encouraging to sit with a group of you all and realize that there's some action being taken in Louisiana about some issues that -- it's scary to me to think that some of the issues that's being discussed here today, we didn't have a forum for them to be discussed like this before, and so I think we're making progress. The talk that we heard from the gentleman from West Monroe, that's progress, and although everything may not be perfect, I am really encouraged about the progress. And that's all I got to say.

MR. KIRKPATRICK:

Thank you.

Yes, sir. A public comment, you want to come

speak into the microphone?
MR. WOODS:
Yes. I'm P.M. Woods. I'm on the Board of Directors of the Louisiana Rural Water Association, starting my fourth term with them, and this has been a -- something that's been one of my passions for a long time now. We have -- everybody has to be concerned, and one of the big problems that we have is public awareness. We need to get some sort of program out that we just -- with the radio stations, T.V. stations, newspapers, that we make the public aware that it's all of our problems. This could take care of a lot of the private wells that we don't know about. And I'm sure that Louisiana Rural Water would be happy to work with some sort of program in identifying these wells that we don't know about if we've got some idea as to -- DOTD knows where a lot of wells are that probably have been forgotten about, and in our rounds and everything, we could possibly help locate some of them and check out the status and -- because -- just because it's on private property, just like Representative Downs and I were talking about, you could take a private well that's drilled into the aquifer and contaminate this for everybody. I mean, just because it's on private property, it shouldn't be off limits or out of bounds. But I think public awareness is going to be the key to finding a lot of these old wells, the old home places that people just have forgotten about. You may have a well sitting out there, and maybe somebody has just been dumping stuff in it, but it needs to be checked

out.
MR. KIRKPATRICK:
Thank you. Any other comments?
Yes, sir?
MR. DUEX:
Thank you. I'm Tim Duex with the University of Louisiana geology department. And I think with this recent discussion brings up the point of these regional bodies that we're in the process of formulating, and I'd like to say that I think that would be a good place for this public forum to take place, also. I appreciate the language that's come out, and I'd like to reiterate that we've requested formation of the Chicot group, and I want you to be aware that we're still interested in forming up that body.
MR. KIRKPATRICK:
As we said earlier, hopefully, we can approve that language at our next meeting.
MR. DUEX:
What would be the next step in going ahead with our application?
MR. KIRKPATRICK:
Tony, can you address that?
MR. DUPLECHIN:
Okay. The next step for rule promulgation is to go through the Administrative Procedure Act. The way the statute was written doesn't allow for any group to come up and say, "Here we are, we want to be the regional body." It's the Commissioner's decision to name these regional bodies, but having a group in place

that would be interested in helping to serve in such capacity would be good. So the next part here is to get a consensus on these proposed rules and move ahead with the Administrative Procedure Act process and get them published and finalized.

MR. DUEX:

Would we have to reapply? Don Broussard from the Lafayette's Authority System applied a couple of years ago, a little over two years ago, to this Commission, and as far as I know, it's still active, but we --

MR. DUPLECHIN:

It's not so much a matter of applying to be the group, the regional body. You know, you could ask the Commissioner to consider the concerns that you have, but it would be the Commissioner's decision to name the body and who's on the body.

MR. DUEX:

Well, I guess I'd like to formally request you consider that.

MR. KIRKPATRICK:

Duly noted.

MR. DUEX:

We have -- we've had several meetings, three or four meetings, and we have a contact list of 35 or 40 people. If you'd like that, I can forward that to you, and that might form the basis for choosing members for the regional body.

MR. DUPLECHIN:

Okay.

MR. KIRKPATRICK:

Certainly. Forward that to Tony, I think that would be the best step to take.

MR. DUEX:

Thank you.

MR. BOLOURCHI:

Mr. Chairman, one other comment in regard to abandoned wells or wells that have been damaged, I would recommend that if any of you should come across on of those wells, we would like to know where they're located, just let us know and we have some field inspectors that we can send out there. We said we would try to help. If you have a GPS, just leave the lat-long on it, that's all we need. Appreciate it.

MR. KIRKPATRICK:

All right. I think it's time to discuss the next meeting time.

MR. DUPLECHIN:

Okay. Even though the statute was amended to do away with the quarterly meetings and only go to two meetings a year, I would like to try and stay with a quarterly meeting schedule, if we could, especially since we have outstanding business with these proposed rules, or at least proposed language, for regional water bodies. So I would like for us to try and get together during perhaps October. That will give everyone a chance to look this over.

MR. KIRKPATRICK:

Do you have a particular week in October you're looking at?

MR. DUPLECHIN:

Say, the 16th, the afternoon of the 16th, that's a Monday?

MR. KIRKPATRICK:

We can -- maybe if we can send an email out --

MR. DUPLECHIN:

We will send an email out to Commission members and see what kind of feedback we get, but let's go ahead and pencil that in as the 16th of October at 1:30 in the afternoon.

MR. KIRKPATRICK:

Okay. With that, is there a motion to adjourn?

MS. GAUTREAUX:

Motion.

MR. WELSH:

Second.

MR. KIRKPATRICK:

So moved. Second from Mr. Welsh, and hearing no objection, we are adjourned.

CERTIFICATE

I, MICHELLE S. ABADIE, Certified Court Reporter, do hereby certify that the foregoing Ground Water Resources Commission meeting was conducted on July 31, 2006, in the Department of Conservation Hearing Room, Baton Rouge, Louisiana; that I did report the proceedings thereof; and that the foregoing pages, numbered 1 through 83, inclusive, constitute a true and correct transcript of the proceedings thereof.

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MICHELLE S. ABADIE, CCR #24032
CERTIFIED COURT REPORTER